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DOCKET NO. KQ5-616

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REMARKS

Entry of this response is proper under 37 CFR §1.116, since no new claims or issues are presented.

Claims 1-20 are all the claims presently pending in the application. Claims 1, 12, 13, and 20 are independent.

The amendments herein, if any, are made only to more particularly point out the invention for the Examiner. Applicant also notes that, notwithstanding any claim amendments herein or later during prosecution, Applicant's intent is to encompass equivalents of all claim elements.

Claims 1-5, 10, 12-15, 18, and 20 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by US Patent No. 5,912,705 to Saruwatari. Claims 6-8 and 17 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Saruwatari, further in view of US Patent No. 6,639,626 to Kubo et al. Claims 9, 11, 18, and 19 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Saruwatari, further in view of US Patent Publication No. 2002/0058536 to Horii et al.

These rejections are respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

An exemplary embodiment of the claimed invention, as defined by, for example, independent claim 1 is directed to a portable communication apparatus that includes an image-capturing section for capturing an image depending on an operation of a shutter key and for sensing images in real-time, a display that includes a viewfinder display that displays the real-time sensed images and that includes a reference frame that indicates a predetermined optimal size of characters to achieve a predetermined success rate for character recognition for a character positioned within the reference frame, and a character recognition section for recognizing a character from a captured image.

Conventional portable communication devices have included image capturing devices and user-input devices, such as, for example, a number pad, but have not been able to input data using the image capturing device.

The present invention enables the input of data using an image capturing device.

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Further, the present invention includes a display that includes a viewfinder display that displays the real-time sensed images and that includes a reference frame that indicates an optimal size for the character image for character recognition. In this manner, the present invention improves the performance of a character recognizer by ensuring that characters within a captured image are approximately of an optimum size.

II. THE PRIOR ART REJECTIONS

The Examiner considers that Saruwatari anticipates claims 1-5, 10, 12-15, 18, and 20, and, when modified by Kubo, renders obvious claims 6-8 and 17, and when further modified by Horii, renders obvious claims 9, 11, 18, and 19.

Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by Saruwatari and that the rejections of record fail to establish a *prima facie* obviousness rejection.

The Anticipation Rejection Based on Saruwatari

The Examiner persists in the anticipation rejection for claims 1-5, 10, 12-15, 18, and 20. Applicant does not herein repeat all the arguments of the previous response but focuses, instead, on those arguments considered most relevant to an appeal and again points out that the rejection of record fails to establish a *prima facie* rejection, since the references cited do not teach all elements of the claimed invention.

More specifically, in the first paragraph on page 3 of the latest Office Action, relative to the rejection for claim 1, the Examiner alleges that the reference frame " ... (*"small area" in col. 2, lines 21-24 as shown in fig. 4B as num. 42)* that indicates a predetermined optimal size (or represents a "great number of pixels, i.e., high resolution" in col. 2, lines 25-32 or can be adjusted to a larger size as shown in fig. 4B, SS6:42 and smaller size in fig. 4B: SS7-42 as desired by a user represented in fig. 5 as S12) of characters (in the high resolution image with characters) to achieve a predetermined success rate (or better accuracy of recognition as implied in col. 2, lines 9-15) for character recognition for a character positioned within the reference frame."

In response and as explained in Applicant's previous response, Saruwatari teaches an adjustable size for the character recognition frame, based on detecting the movement of the

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user's eyeball and using such motions to define the character recognition area (see line 50 of column 3 through line 26 of column 4). There is no predetermined reference frame in Saruwatari, let alone a predetermined reference frame predetermined to be optimal in size for character recognition, based on a success rate if the character is positioned within the reference frame.

None of the secondary references are relied upon to modify this technique in primary reference Saruwatari and so do not overcome this fundamental deficiency.

Hence, turning to the clear language of the claims, in Saruwatari there is no teaching or suggestion of: "...a display that includes a viewfinder display that displays said real-time sensed images and that includes a reference frame that indicates a predetermined optimal size of characters to achieve a predetermined success rate for character recognition for a character positioned within the reference frame", as required by independent claim 1.

The advantage of this feature over the prior art methods is that character recognition is improved by having the user move the image to fill up, as much as possible, this pre-designated window within the display. This allows the limited resolution on a small image devices, such as used on a cell phone, to best utilize the image information for purpose of character recognition processing. Primary reference Saruwatari does not address a portable communication apparatus and, even if it is considered to confront this problem, the method of defining the area of image data to be isolated for purpose of character recognition is clearly based upon an entirely different mechanism than that of displaying a pre-determined window into which the user will move the portion of interest for character recognition.

Relative to the rejection for claims 2 and 3, Applicant submits that the method of Saruwatari is based upon detecting the user's eyeball motion as the mechanism for defining the space for character recognition. Not only is this method fundamentally different from that of the present invention, Applicant submits that Saruwatari thereby teaches against using the claimed method.

Relative to the Examiner's response in paragraph 4 on page 4 of the Office Action, wherein the Examiner acknowledges that functional language describing an element within a device or apparatus must be evaluated, as per MPEP §2173.05(g), Applicant brings to the Examiner's attention that the latest rejection still improperly rejects claim 4 under the improper rationale that function language can be ignored.

Therefore, Applicant submits that claims 1-5, 10, 12-15, 18, and 20 are not anticipated

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by Saruwatari and that all pending claims are clearly patent over Saruwatari.

The Rejection Based on Secondary Reference Kubo for Claims 6-8 and 17

Relative to the rejection for claims 6-8 and 17, the Examiner relies upon the timer 75 of Figure 13 of Kubo, further alleging that such timer satisfies the requirement of these claims and that one having ordinary skill in the art would have modified primary reference Saruwatari "... because Kubo's teaching is able to avoid problems with quick moving objects in col. 1, lines 1-15 as can be encountered in Saruwatari's natural pictures of landscapes that inherently have quick moving objects such as animals."

In response, Applicant respectfully points out that the timing generators 72, 73 is described in lines 14-22 of column 13 of Kubo as simply generating driving control signals for the two image sensors 58, 63, further described as being "... clock signals, such as integration (or exposure) start/termination timing signals and read-out control signals (e.g., horizontal synchronizing signals, vertical synchronizing signals, and transfer signals), and outputs these signals to the image sensors 58 and 63 via drivers (not shown)."

However, Applicant submits that this description does not include any suggestion of a predetermined time delay after operation of the shutter key, as required by claims 6, 8, and 17.

In the second paragraph on page 3 of the Office Action, the Examiner states: "*The examiner believes that the rationale for using Kubo is reasonable, because Kubo provides a method that prevents blur due to motion of an object that can occur in Saruwatari since Saruwatari is also interested in "natural pictures" in col. 3, lines 35-44 that inherently have fast moving objects such as animals.*"

Applicant respectfully points out that preventing blur from fast moving objects will not be achieved by a time delay after operation of a camera shutter key, since blur will only be controlled by limiting the time exposure. Thus, this rationale would be inadequate as an explanation to add timing generators 72, 73 of Kubo to Saruwatari.

Further, Applicant submits that the timing operation described beginning at line 60 of column 9 of Kubo would not apply in the environment of primary reference Saruwatari since the primary reference does not have two CCD sensors.

Therefore, Applicant again submits that the rejection of record fails to provide a reasonable motivation to modify Saruwatari by adding a predetermined time delay after

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pressing the shutter key, particularly relative to a character recognition processing.

As explained at lines 14-22 of page 4 of the specification of the present application:

"Since the portable telephone device is usually small-sized and lightweight, clicking the shutter key causes its body to easily shake, so that the captured image becomes blurred, resulting in reduced character-recognition success rate. To prevent camera shake when clicking, an actual image capturing operation of the camera section 17 is activated a lapse of the predetermined time period after the shutter key has been clicked."

Therefore, contrary to the concern in Kubo over blurring of fast moving objects, this feature of the present invention is related to the small size of the portable communication device (to which neither Saruwatari nor Kubo is directed), as used for attempting to take image data for character recognition and the user's inadvertent shaking of the small device after clicking the shutter key.

Therefore, Applicant again respectfully submits that the Examiner has fail to provide a reasonable rationale to modify primary reference Saruwatari, so that the rejection currently of record for claims 6-8 and 17 fails to establish a *prima facie* obviousness rejection.

The Rejection Based on Secondary Reference Horii for Claims 9, 11, 16, and 19

The Examiner maintains the rejection based upon secondary reference Horii, because, as best understood, of the description in paragraph [0099] of Horii: "... *it is possible to easily use the calling function, the Internet connection, mail transmission, and other functions.*"

However, Applicant again submits that Horii is non-analogous to primary reference Saruwatari. Saruwatari involves a camera, whereas Horii involves a mobile phone. Applicant submits that the Examiner's initial burden to establish a *prima facie* rejection is to provide a rationale to modify the primary reference. There would be no reason to modify the camera described in primary reference Saruwatari, since it is not a communication device, so there would be no need to modify this camera for the reason described in paragraph [0099] of the secondary reference.

The Examiner's rationale is merely a circular argument wherein the reason for modification is simply because one would thereby have achieved the alleged benefit of having made the modification. Applicant submits that such circular reasoning clearly constitutes improper hindsight.

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III. FORMAL MATTERS AND CONCLUSION


In view of the foregoing amendments and remarks, Applicant again respectfully submits that claims 1-20, all the claims presently pending in the Application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the Application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: _____

6/3/08

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CERTIFICATION OF TRANSMISSION

I certify that I transmitted via facsimile to (571) 273-8300 this Amendment under 37 CFR §1.116 to Examiner D. Rosario on June 3, 2008.



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